



Original Vision, Purpose and Mission

9/15/2010

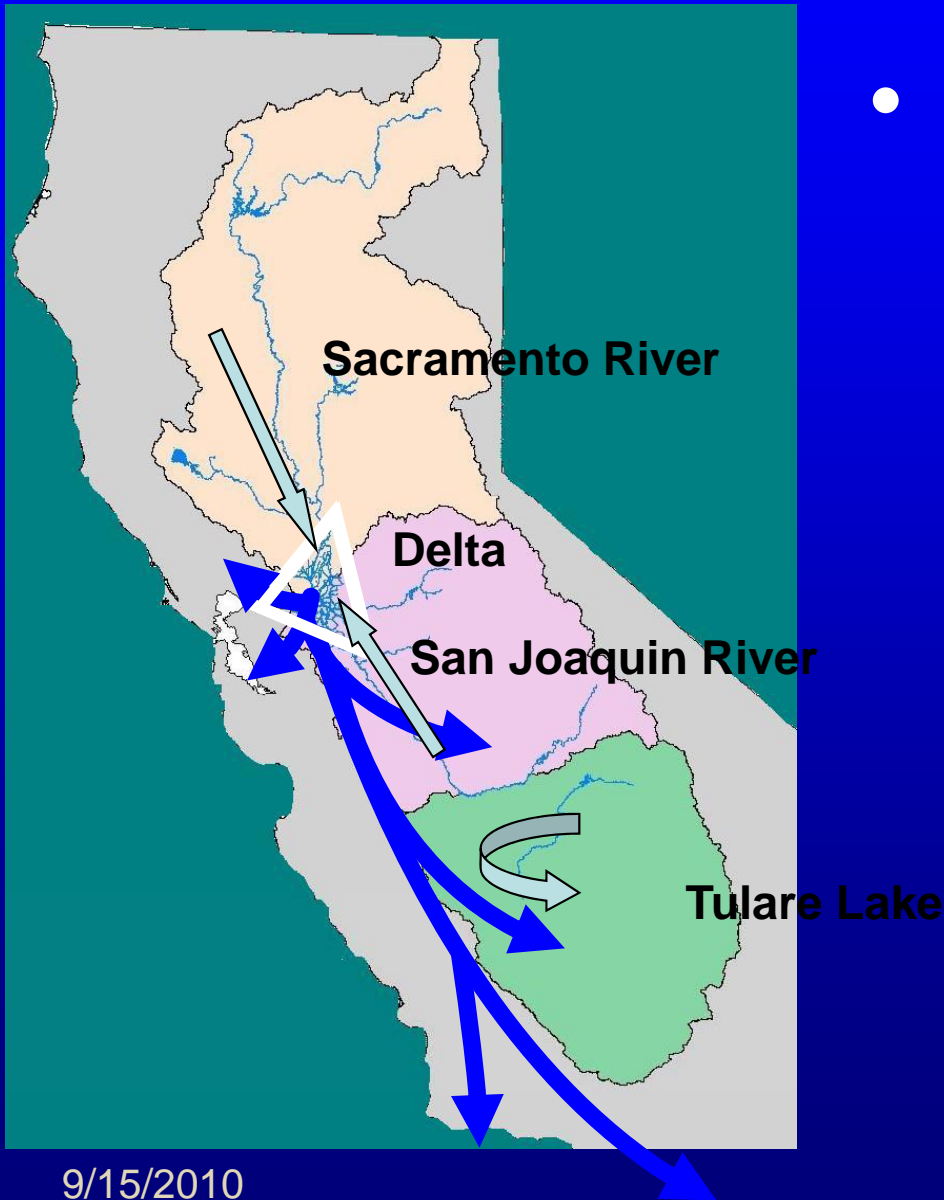


Overview

- Regional Salt Issues
- Role of Regulation
- Options
- CV-SALTS
 - Vision
 - Purpose
 - Mission



Salt Issues



- **More salt enters the region than leaves**
 - Sacramento Basin has relatively few salt impaired areas but salt exported to the Delta can be picked up and redistributed by SWP and CVP
 - San Joaquin River is the SJR Basin's sole outlet. Salt imports exceed export capacity
 - Tulare Lake Basin has no reliable outlet

Salt Issues

- **Salt build-up threatens agricultural productivity**
(Delta, Tulare Lake, Westside SJR Basin)
 - Need for Agricultural Drainage Recognized Since Late 1800's
 - CVP's San Luis Unit Authorized in 1960



Salt Issues

Increasing salt concentrations (including NO_3) in groundwater threaten drinking water

- Particularly areas with:
 - Irrigated agriculture
 - Dairies
 - Septic systems

Salt Issues

- USGS Eastern San Joaquin and Sacramento Valley Studies:
 - Groundwater TDS concentrations increased significantly since the 1950's throughout most of the Sacramento Valley
 - Nitrate concentrations significantly increased in well water sampled between 1986 and 1995
 - Nitrate concentrations in about one fourth of the domestic water-supply wells sampled in the eastern San Joaquin Valley exceeded the USEPA drinking-water standard.



Salt Issues

- **Water used for dilution is (usually) water lost to other uses**



Activities Contributing to the Salinity Problem

- Agricultural Water Users
- Urban Water Users
- Rural Water Users
- Environmental Water Uses
- Industrial Users
- Water Providers



Salinity Impairments in Surface and Groundwaters

Exacerbated locally from many sources including:

- Discharges to land associated with municipal wastewater disposal
- Septic tanks
- Oil field brines
- Confined animal facilities
- Food processors



Salt Issues

- If the Region does not change it's approach to salt, by 2030...
 - Direct annual costs anticipated to range between **\$1 to 1.5 BILLION**
 - Total annual income impacts statewide anticipated between **\$1.7 to 3 BILLION**

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There is presently no means of distributing these costs equitably or assigning costs to all responsible parties.

Role of Regulation

Regulatory Basis:

- Basin Plans
 - Identify how we protect water quality
 - Regulatory document
 - Establish beneficial uses
 - Establish water quality objectives to protect BUs
 - Prescribes an implementation plan
 - Actions and timetables

Role of Regulation

Regulatory Tools:

- Setting limitations in WDR and NPDES permits
- TMDLs

Waste Discharge Requirements (WDRs)
are our primary tool for regulating salt

Role of Regulation

WDRs:

- Authorize Waste Discharge
- Can Include:
 - Limits on salt concentrations
 - Limits on salt loads (amount of salt)
 - Total prohibition of discharge
- Can also Require:
 - Studies and reports
 - Implementation of salt control practices

Role of Regulation

WDRs MUST comply with Basin Plans

**Most sections of the current
Basin Plans addressing salt are over
30-years old**

Role of Regulation

Results:

- Limited data available for staff to interpret water quality objectives and implement the Basin Plans
- Over time, salt has become a more prominent issue for Regional Board
- Outcry from dischargers and others for doing too much or too little

Role of Regulation

Need:

- Update Regulatory Basis
 - ie. Update Basin Plans

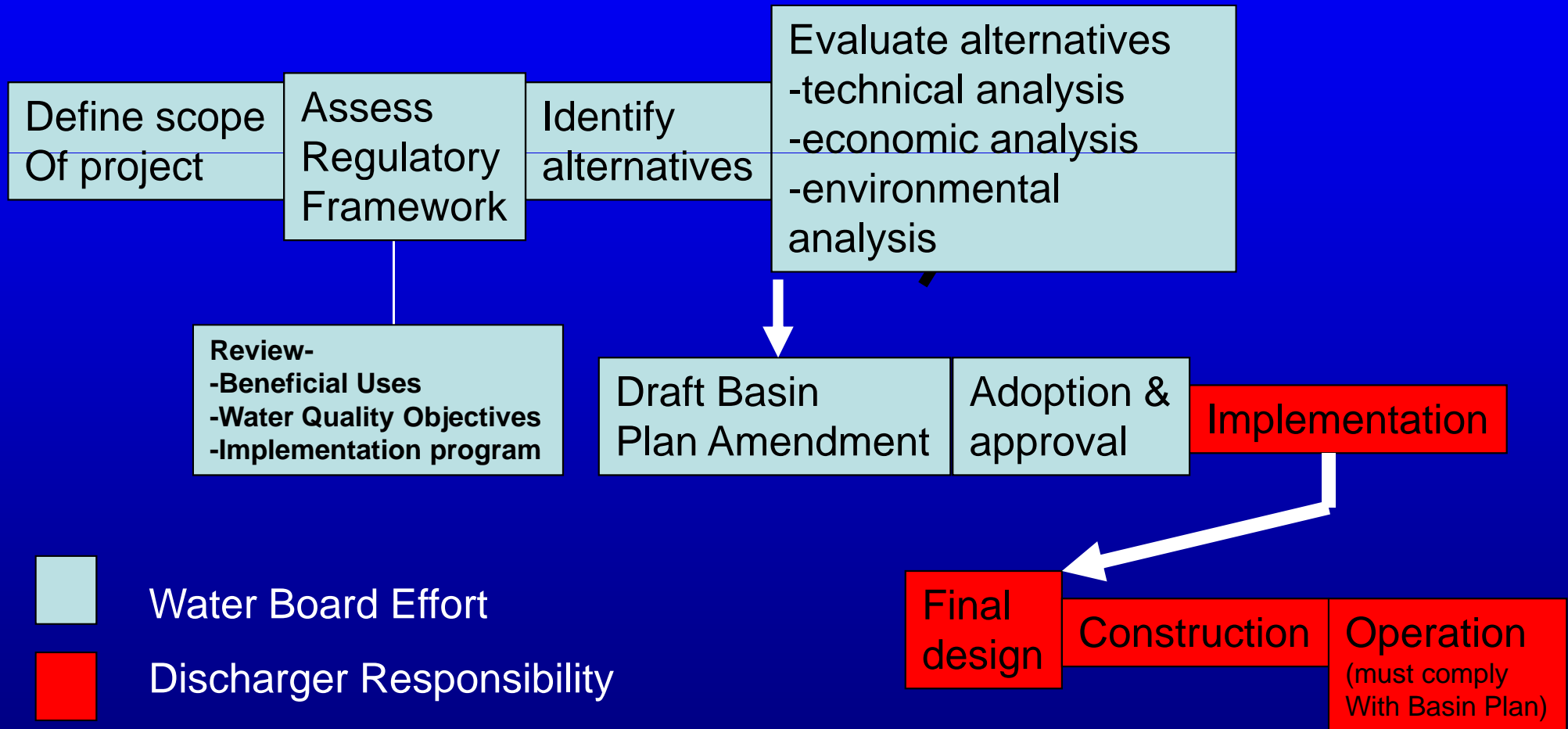
Options

- Traditional Regional Board approach
- Stakeholder approach
 - Collaborative and integrated approach

(No Action is also an alternative—if willing to accept economic cost)

Elements in Salinity Planning and Management

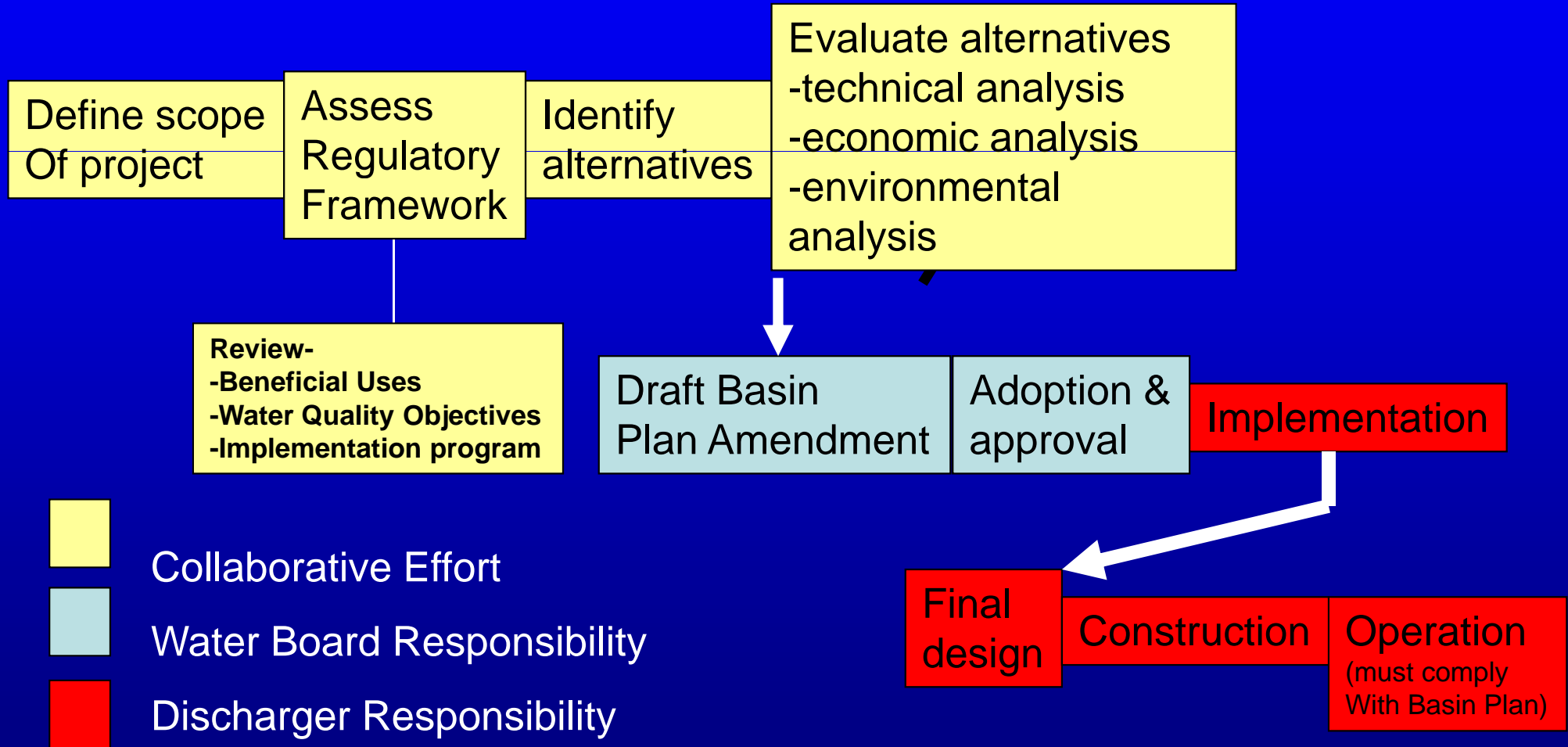
Traditional Staff Driven



****Note public comment periods during Basin Planning Process****

Elements in Salinity Planning and Management

Collaborative Effort



****Note public comment periods during Basin Planning Process****

Advantages to Collaborative Approach

- Basin Plan - based on better data
 - more effective
- Stakeholder involvement and ownership
- Better addresses all needs and concerns
- Protects water quality
- Utilize everyone's efforts & resources more efficiently and effectively

CV-SALTS: Beginnings

- **January 2006:** Joint SB/RB5 meeting
 - Food processor permit concerns
 - Westside ag drainage
 - History lesson from Center for Water Resources
 - NRCS toolbox

CV-SALTS: Beginnings

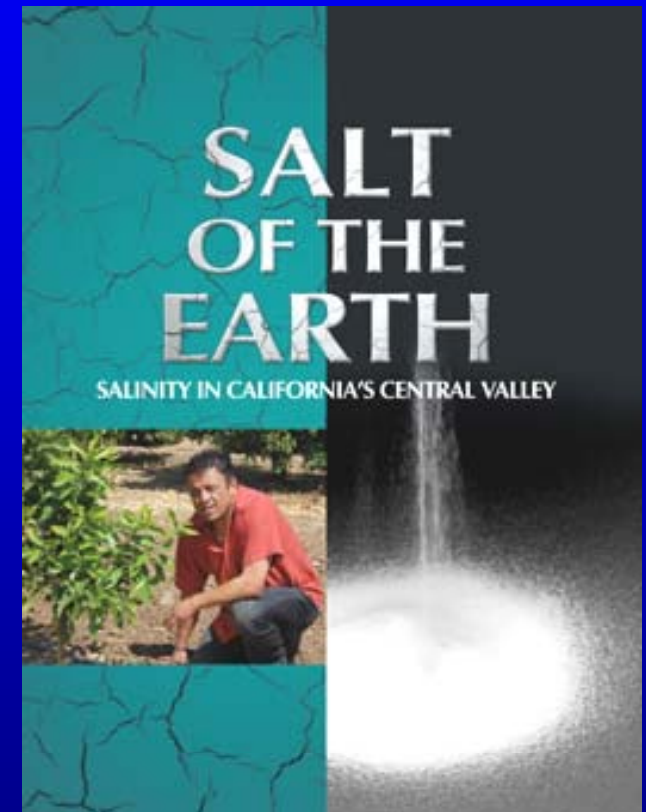
- **January 2006:** Joint SB/RB5 meeting
 - Food processor permit concerns
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 - History lesson from Center for Water Resources
 - NRCS toolbox
- **March 2006:** Request for state funding

CV-SALTS: Beginnings

- **January 2006:** Joint SB/RB5 meeting
 - Food processor permit concerns
 - Westside ag drainage
 - History lesson from Center for Water Resources
 - NRCS toolbox
- **March 2006:** Request for state funding
- **May 2006:** Release of staff report and creation of a salt task force and working committees
 - Central Valley Salinity Policy Group (2007),
 - now known as the Central Valley Salinity Leadership Group

CV-SALTS Launch

- \$1 Million from State Board to our Board
 - Economic study
 - Metadata report
 - Educational Video
 - Strategy
- Committees formed
 - Exec, TAC, Econ/Soc Impact, Public Ed & Outreach
 - Initial tasks were to provide input on implementation of contracts



Original Vision

Collaboratively develop and implement a viable Salinity Management Plan for California's Central Valley to:

- sustain the Valley's lifestyle,
- support regional economic growth,
- retain a world-class agricultural economy,
- maintain a reliable, high-quality urban water supply; and
- protect and enhance our local environment.

Original Vision

Salinity Management Plan Components:

- A comprehensive evaluation of water quality data, water and wastewater management options and policies
- Potential measures that can be implemented to better manage salinity
- Fully developed and evaluated interim and long-range salinity management plans

Original Purpose

Primary Outcome of Planning Phase:

- Update of the Basin Plans
 - Beneficial Uses
 - Water Quality Objectives
 - Implementation
 - Actions and Timelines

The Original Mission

Develop a comprehensive regional salinity management plan that is robust enough to support basin plan amendments

Plans to be amended:

- Sacramento/San Joaquin River Basin Plan
- Tulare Lake Basin Plan
- Delta Plan

Work to be Accomplished

1. Review of existing conditions through data collection & analysis
2. Identification of data gaps
3. Development of new information required to conduct assessment of alternatives
4. Review of salinity treatment, management and disposal options

Work to be Accomplished

6. Review of existing policies and programs
7. Review of alternative local and regional management options, including economic and environmental assessments
8. Development of revisions for the basin plans
9. Adherence to the many requirements of the CEQA and Water Code process, including public outreach and stakeholder involvement

Work to be Accomplished

9. Consideration for approval of the eventual proposed Basin Plan revisions by the CVRWQCB & the SWRCB
10. Processing of the proposed Basin Plan revisions approved by the CVRWQCB and the SWRCB through the Office of Administrative Law

Included Assignments

- 1) Address the requirements of the State Recycled Water Policy
- 2) Develop salt objective(s) for the San Joaquin River between Sack Dam and Vernalis
- 3) Address irrigation-related salt issues

Included Assignments

- 4) Be responsive to salt management concerns of the region's economically disadvantaged communities
- 5) Develop a methodology for evaluating salt management practices
- 6) Review SEP proposals when asked

A man wearing a green long-sleeved shirt, blue jeans, and a dark cap is standing on the left side of the frame, looking out over a vast, flat, rocky landscape. The ground is covered in light-colored rocks and patches of low-lying vegetation. The horizon is flat and extends to the top of the frame under a clear blue sky.

Today. . . .

**Review, update, confirm
vision/purpose/mission**

**Identify the activities needed to
accomplish the mission and
the process that will be utilized
to insure the activities are
completed.**

END

Role of Regulation

Current efforts regulating salt:

- Water Quality Plans
- Salt/Boron TMDL for Lower SJ River
- Irrigated Agriculture Waiver
- Existing Dairy General Order
- Implementation of stricter limits and requirements in permits
 - Moving toward RO in some areas

Issues

- **Central Valley communities are not well organized and many are economically disadvantaged**
- **If the problem is addressed solely through regulatory controls, Central Valley dischargers may be tasked with resolving salt problems they are only partially responsible for**
- **The salt problem is getting worse**

Early CV-SALTS Projects

The first \$1 million

- **Strategy report**
 - View from 30,000 ft
- **Educational Video**
 - Raise general public awareness
- **Metadata report**
 - Begin to identify salt data resources
- **Economic Study**
 - Life in 2030 without regulatory change (No Project alternative from a regional economic perspective)

Schedule concerns

Tick, tick, tick...

- Upstream Objective
 - Already late
- Recycled Water Policy
 - Feb 2013 / 2015 stakeholder plan
 - Feb 2014 / 2016 Board adoption
- Other
 - Review cycles
 - Irreversible damage

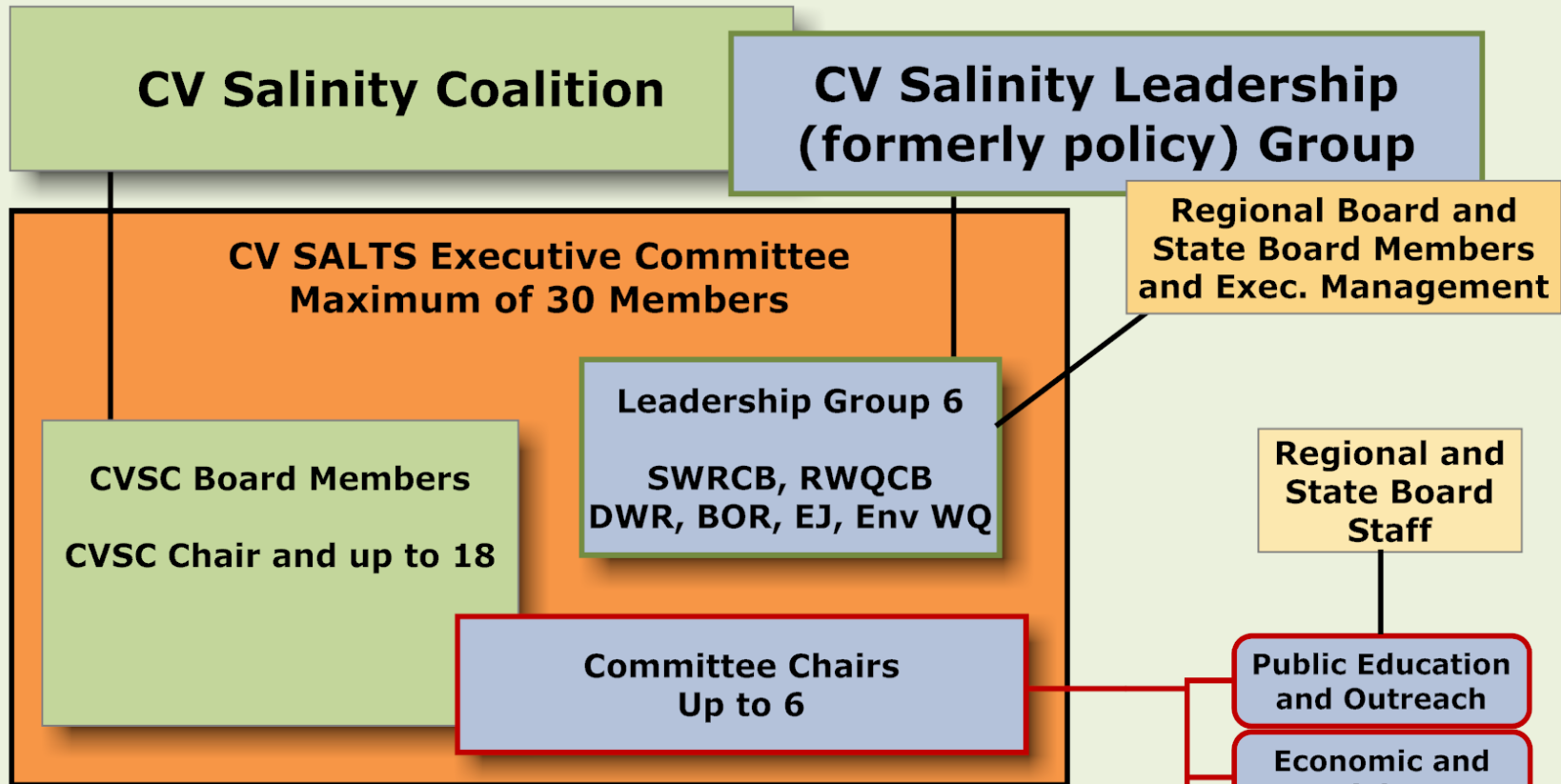
Recently Completed and Current Projects

- **Salt Source Survey** [study completed, analysis underway]
 - 3 study areas (Yolo, Tule Lake & Modesto areas)
 - Funded by CVSC
- **Beneficial Use and Objectives Study**
 - Phase I [near completion] funded by state CAA funds
 - Phase II to be funded by CAA with CVSC match

CV Salinity Coalition and CV SALTS Initiative

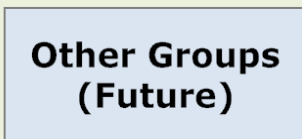
Ensuring Sustainable High Quality Water Supply
For All users of Central Valley Waters

**Leadership
Steering
Groups**

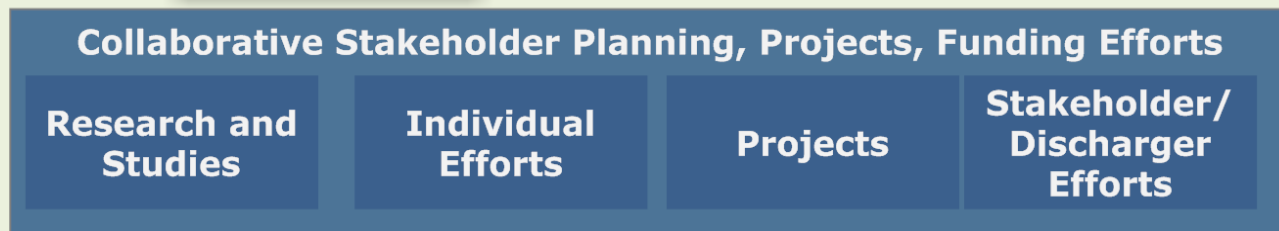


**Efforts
Approval**

Group membership is nonexclusive



Outcome



**Working
and
Review
Groups**

CV-SALTS Participants

- **Leadership Group (CVSLG)**

Decision-makers from

- Fed, state and local government (including SB, RB5, RB2 & RB8)
- Water purveyors (districts and district groups)
- Water associations
- Industry and ag organizations
- Social and environmental justice groups
- Research institutions

CV-SALTS Participants

- **State Water Resources Control Board**
 - Board members (CVSLG)
 - Management (Executive Committee)

- **Central Valley Regional Water Quality Control Board**
 - Board members (CVSLG, Executive and other committees)
 - Management (Exec and other committees)
 - Staff (Committees)

CV-SALTS Participants

- **Central Valley Salinity Coalition (CVSC)**
 - 501c6 organization formed in 2008 to fund and facilitate the CV-SALTS effort
- **Other interested Parties**
 - CV-SALTS meetings are open to the public

Role of the Central Valley Salinity Policy Group

- Members represent cross-section of stakeholders having interest in mitigating salinity impacts to Central Valley waters
- Critical role in providing advice & direction on –
 - the development and conduct of studies,
 - the development of revisions to the basin plans, and
 - the CEQA process

Role of the Central Valley Salinity Policy Group

- Management –
 - Extensive use will be made of conference calls and e-mail
 - Committees will be formed as work progresses to address focused issues

Role of the Central Valley Regional Water Quality Control Board

- In accordance with the statutes and regulations governing its actions, continue to take the actions necessary to protect beneficial uses of the waters within the Central Valley Region
- Actively enforce policy-based criteria directed towards protection of beneficial uses of receiving waters from further degradation due to increasing salinity concentrations

Expectation of Dischargers

- Take the necessary interim measures required for the significant reduction of salinity discharges from their facilities into the ground and surface waters of the Central Valley
- Support the development of long-term solutions

SALINITY MANAGEMENT PLAN

SUBJECT TO CHANGE

ID	Task Name	Start	2006		2007		2008		2009		2010		2011		2012		2013		2014		2015	
			H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2
1																						
2	Program Management	Thu 11/30/06																				
3	Policy Group	Thu 11/30/06																				
4	Salinity Coalition	Tue 1/1/08																				
5	Salinity Commission	Tue 1/1/08																				
6	Contracted Project Lead	Tue 1/1/08																				
7	JPA Lead	Mon 1/2/12																				
8																						
9	Public Participation	Thu 11/30/06																				
10	Prepare Public Outreach Plan	Thu 11/30/06																				
11	Implement Public Outreach Plan	Tue 7/31/07																				
12	Prepare for Joint SB/RB Salinity Workshop	Thu 11/30/06																				
13	Conduct Workshop	Mon 3/19/07																				
14	Prepare for facilitated stakeholder meetings	Thu 11/30/06																				
15	Conduct meetings	Mon 3/19/07																				
16	Prepare for and implement salinity conference & tour	Thu 11/30/06																				
17	Hold conference and conduct tour	Tue 8/14/07																				
18																						
19	Technical Assessment	Wed 11/1/06																				
20	Collect Data, Initial Modeling, Identify Data Gaps	Wed 11/1/06																				
21	Prepare and award contracts for additional work	Tue 7/1/08																				
22	Fill data gaps	Thu 1/1/09																				
23	Comprehensive technical modelling	Fri 1/1/10																				
24																						
25	Basin Planning	Thu 11/30/06																				
26	Identify policy issues to be addressed	Thu 11/30/06																				
27	Evaluate cost & efficiency of management options	Thu 1/1/09																				
28	Narrow alternatives	Sat 1/1/11																				
29	Model management alternatives	Mon 1/2/12																				
30	Prepare draft Basin Plan staff report	Tue 1/1/13																				
31	Board consider proposed Basin Plan amendments	Wed 1/1/14																				
32	State Board, OAL, US EPA review amendments	Thu 1/1/15																				

